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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,987	06/25/2003	Anthony J. Wasilewski	A-8919	6302
5642 7590 11/08/2007 SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044			EXAMINER CHAI, LONGBIT	
			ART UNIT 2131	PAPER NUMBER
			NOTIFICATION DATE 11/08/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

**Office Action Summary**

Application No.

10/602,987

Applicant(s)

WASILEWSKI ET AL.

Examiner

Longbit Chai

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. Presently, pending claims are 1 – 19.

### ***Priority***

2. This application was originally filed on 25 June 2003; however, in view of Provisional application 60/054,575 filed on 1<sup>st</sup> August 1997 and Affidavits submitted on 14 March 2007, the expected earliest beneficial filing date by Applicants for that particular amended claim limitation is 1 August 1997. Examiner notes by using the original filing date 25 June 2003, the Unger reference on the record (U.S. Patent Number 2003/0026423 with Filing Date on 2 January 2002) can be used for rejection as presented in similar claim limitation recited in the co-pending application 10/602,986 (see 1<sup>st</sup> Non-Final submitted on 11 January 2006).

### ***Response to Arguments***

3. **Pre-Appeal (or Appeal) Brief** filed on 26 October 2007 is persuasive and a new ground of rejection has been made with the new reference of Kaufman (U.S. Patent 5,081,678) to withdraw the finality of the rejection.
4. Regarding the **Affidavits** filed on 3/14/2007, Examiner notes, upon further consideration, the argument presented in the Affidavits (page 4) to support the claim amendment filed on 31 August 2007 is not persuasive in lack of any showing or evidence that using a packet identifier to select for partial encryption based on the video/audio/data service component types. Examiner notes the provisional disclosure (60/054,575), as described in Affidavits (page 4), fails to disclose any specific selection criteria with respect to selecting which

packet to encrypt -- for instance, every fourth packet (e.g. a random packet counter) could be selected for encryption or any packet following an audio packet could be selected for encryption. Therefore, it may not be obvious to a person of ordinary skill in the art at the time of invention to conceive a selection criteria of using a packet identifier to select for encryption a portion of each of a plurality of digital bit streams from a transport stream – especially such a claim language was not recited in the claims originally filed on 25 June 2003 to be qualified as part of the original disclosures and instead, it was a claim amendment filed on 31 August 2007 which was intended to overcome the prior-art rejection after viewing the presented reference. Examiner notes an issue of a new matter is thus raised for at least the reasons set forth above.

5. Applicant alleged that Wasilewski does not teach “using a packet identifier to select for encryption a portion of each of a plurality of digital bit streams from a transport stream”.

Examiner notes, first of all, Wasilewski teaches (a) one or more service components (i.e. any service component) of a given basic service may be encrypted prior to transmission (Wasilewski: Column 4 Line 58 – 67) and (b) each service component (i.e. elementary stream) is packetized and inserted into the payload section of a transport stream (Wasilewski: Column 14 Line 4 – 7 and Column 13 Line 57 – 59). Accordingly, Wasilewski teaches a transport stream constitutes a portion of encryption packets and a portion of non-encryption packets.

Examiner notes, secondly, regarding encryption packets, Kaufman (2<sup>nd</sup> Reference) teaches a particular key identifier from a plurality of keys can be placed inside a packet simply for encryption / decryption security purpose (Kaufman: Column 2 Line 2 – 10 / Line 44 – 56) – Examiner notes the broadest and reasonable claim interpretations are made, according to MPEP 2111, such that the key identifier placed inside a transported packet can be considered as a packet identifier for determining the selection of encryption upon a given transport stream, as taught by Wasilewski, to meet the claim language.

### ***Information Disclosure Statement***

6. The information disclosure statement filed on 12/06/2005 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the inventor (applicant) name, application number, and some of the attorney docket numbers as indicated on the IDS are incorrect.

It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1 and 13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 13 of copending Application No. 10/602,986. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 13 of the instant application are envisioned by the claims of copending application that contain all the limitations of claims of the instant application because *the claim limitation of "the partially-encrypted bit stream" as recited in the instant application is equivalent to that of "the combined bit stream" as presented in the co-pending application* and as such are unpatentable for obvious-type double patenting.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to support the alleged claim limitation "selecting

for encryption based on a packet identifier". According to the original disclosure of the specification (i.e. Provisional 60/054,578: Page 28 Line 25-28 & SPEC: Page 27 Line 19 – 29) that indicates "A subcategory of information can thus be identified by the PID of its packets. As shown at output packets 707, the output from MUX704 is a sequence of individual packets from the various subcategories. Any part or all of MPEG-2 transport stream 701 may be encrypted". Examiner notes, upon further consideration, the argument presented in the submitted **Affidavits** (page 4) used to support the claim amendment filed on 31 August 2007 is not persuasive in lack of any showing or evidence that using a packet identifier to select for partial encryption based on the video/audio/data service component types. Examiner notes the provisional disclosure (60/054,575), as described in Affidavits (page 4), fails to disclose any specific selection criteria with respect to selecting which packet to encrypt – for instance, every fourth packet (e.g. a random packet counter) could be selected for encryption or any packet following an audio packet could be selected for encryption. Therefore, it may not be obvious to a person of ordinary skill in the art at the time of invention to conceive a selection criteria of using a packet identifier to select for encryption a portion of each of a plurality of digital bit streams from a transport stream – especially such a claim language was not recited in the claims originally filed on 25 June 2003 to be qualified as part of the original disclosures and instead, it was a claim amendment filed on 31 August 2007 which was intended to overcome the prior-art rejection after viewing the presented reference. Examiner notes an issue of a new matter is thus raised for at least the reasons set forth above

Any other claims not addressed are also rejected accordingly by virtue of their dependency.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wasilewski (U.S. Patent 5,418,782), which is derived from its patent publication 102(b) date on 23 May 1995, and in view of Kaufman (U.S. Patent 5,081,678).

As per claim 1 and 13, Wasilewski teaches a method for providing a plurality of programs in a conditional access system (Wasilewski: Figure 1 and Column 1 Line 44 – 52), the method comprising the steps of:

using a packet identifier (See Kaufman below) to select for encryption a portion of each of a plurality of digital bit streams from a transport stream (Wasilewski: Figure 1 and Column 4 Line 65 – Column 5 Line 7 and Column 13 Line 65 – Column 14 Line 5: (a) one or more bit streams of audio, video and data streams can be selected for encryption (Wasilewski: Figure 1 and Column 4 Line 65 – Column 5 Line 7: i.e. partial encryption per audio, video and data streams from a transport stream) and besides, (b) each type of audio, video and data streams is uniquely assigned a packet ID (PID) (Wasilewski: Column 13 Line 65 – Column 14 Line 5);



encrypting the selected portion of each of the plurality of digital bit streams (Wasilewski: Column 4 Line 65 – 67: one or more service components of a given basic service can be encrypted prior to transmission – i.e. partially encrypted);

combining the encrypted portion and the unencrypted portion with the transport stream (Wasilewski: Column 5 Line 1 – 7 and Column 4 Line 65 – 67: multiplexing is equivalent to combining); and

transmitting the combined stream (Wasilewski: Column 6 Line 17 – 20).

**However, Wasilewski does not explicitly disclose** to select for encryption a portion of each of a plurality of digital bit streams from a transport stream using a packet identifier.

**Kaufman in view of Wasilewski** teaches using a packet identifier to select for encryption a portion of each of a plurality of digital bit streams from a transport stream (Wasilewski: Column 4 Line 58 – 67, Column 14 Line 4 – 7 and Column 13 Line 57 – 59) & **Kaufman: Column 2 Line 2 – 10 / Line 44 – 56:** Examiner notes, first of all, Wasilewski teaches (a) one or more service components (i.e. any service component) of a given basic service may be encrypted prior to transmission (Wasilewski: Column 4 Line 58 – 67) and (b) each service component (i.e. elementary stream) is packetized and inserted into the payload section of a transport stream (Wasilewski: Column 14 Line 4 – 7 and Column 13 Line 57 – 59). Accordingly, Wasilewski teaches a transport stream constitutes a portion of encryption packets and a portion of non-encryption packets. Examiner notes, secondly, regarding encryption packets, Kaufman (2<sup>nd</sup> Reference) teaches a particular key identifier from a plurality of keys can be placed inside a packet simply for encryption / decryption security purpose (Kaufman: Column 2 Line 2 – 10 / Line 44 – 56) – Examiner notes the broadest and reasonable claim interpretations are made, according to MPEP 2111, such that the key identifier placed inside a

transported packet can be considered as a packet identifier for determining the selection of encryption upon a given transport stream, as taught by Wasilewski, to meet the claim language).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Kaufman within the system of Wasilewski because (a) Wasilewski teaches a transport stream constitutes a portion of encryption packets and a portion of non-encryption packets (Wasilewski : Column 4 Line 58 – 67, Column 14 Line 4 – 7 and Column 13 Line 57 – 59), and for the portion of encryption packets, (b) Kaufman teaches providing an enhanced security mechanism by placing a particular key identifier (instead of key itself) from a plurality of keys inside a packet simply for encryption / decryption of the data packet so that it is not allowed any user of the network to intercept the data packet and, using the key, decrypt the data (Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56).

As per claim 2 and 14, Wasilewski teaches each of the plurality of digital bit streams includes a packet identifier, and wherein using a packet identifier to select for encryption a portion of each of the plurality of digital bit streams by identifying a predetermined packet identifier (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67 & Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: using a packet identifier to select for encryption selects the plurality of digital bit streams by identifying a plurality of predetermined packet identifiers for the portion of encryption packets; wherein the packet w/o the key identifier inside a packet belongs to the portion of non-encryption packets).

As per claim 3 and 15, Wasilewski teaches each of the plurality of digital bit streams includes a packet identifier, and wherein using a packet identifier to select for encryption selects

the plurality of digital bit streams by identifying a plurality of predetermined packet identifiers (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67 & Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: see the same reason for rejection set forth above in claim 2).

As per claim 4, Wasilewski teaches the selected plurality of digital bit streams are programs (Wasilewski: Column 13 Line 57 – 67 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular program / basic service (Video, Audio, Data) and any one or more service components of a given program / basic service can be encrypted prior to transmission (i.e. partially encrypted)).

As per claim 5, Wasilewski teaches the selected plurality of digital bit streams are elementary digital bit streams (Wasilewski: Column 13 Line 57 – 67 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular elementary digital bit stream / basic service (Video, Audio, Data) and any one or more service components of a given elementary digital bit stream / basic service can be encrypted prior to transmission (i.e. partially encrypted)).

As per claim 6, Wasilewski teaches a portion of the selected plurality of digital bit streams is encrypted according to the packet identifier associated with each of the plurality of digital bit streams (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67 & Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: (a) each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be

included and selected according to its packet ID (b) using a packet identifier to select for encryption selects the plurality of digital bit streams by identifying a plurality of predetermined packet identifiers for the portion of encryption packets; wherein the packet w/o the key identifier inside a packet belongs to the portion of non-encryption packets).

As per claim 7, Wasilewski teaches the packet identifier is indicative of each of the plurality of digital bit streams being one of a video stream, an audio stream, and a data stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5).

As per claim 8 and 16, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with the video stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected and accordingly video stream can be included and selected).

As per claim 9 and 17, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with the audio stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected and accordingly audio stream can be included and selected).

As per claim 10 and 18, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with the data stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected and accordingly data stream can be included and selected).

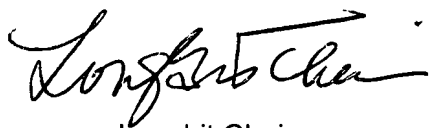
As per claim 11 and 19, Wasilewski teaches the encrypted portion includes at least one of the plurality of digital bit streams associated with at least one of the video stream, the audio stream, and the data stream (Wasilewski: Column 13 Line 65 – Column 14 Line 5 and Column 4 Line 65 – 67: each packet ID is uniquely associated with a particular basic service (Video, Audio, Data) and any one or more service components of a given basic service can be encrypted prior to transmission (i.e. partially encrypted) – i.e. any one of the video stream, the audio stream, and the data stream can be included and selected).

As per claim 12, Wasilewski teaches the portion of the plurality of digital bit streams is encrypted according to a first level encryption method (Wasilewski: Column 4 Line 65 – 67 & Kaufman: Column 2 Line 12 – 17 / Line 2 – 10 / Line 44 – 56: using a packet identifier to select for encryption selects the plurality of digital bit streams by identifying a plurality of predetermined packet identifiers for the portion of encryption packets; wherein the packet w/o the key identifier inside a packet belongs to the portion of non-encryption packets).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Longbit Chai  
Patent Examiner  
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11/3/2007